

Low Loss N Female Bulkhead to TNC Male Cable Assembly using LMR-600 Coax, 6 FT with Times Microwave Components , LF Solder

# LCCA30333-FT6

### Configuration

- Connector 1: N Female Bulkhead
- Connector 2: TNC Male
- Cable Type: LMR-600

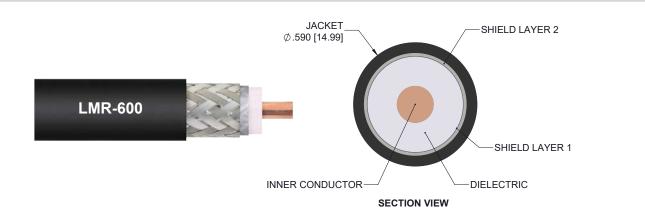
#### **Features**

- Using Times Microwave Components
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 87% Phase Velocity

### Applications

- · General Purpose
- · Laboratory Use
- Antenna Installations

- PE Jacket
- Low Insertion Loss
- · Bend Radius of 6 Inches
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems



#### Description

L-com's LCCA30333-FT6 is a low loss N female bulkhead to TNC male cable assembly using LMR-600 coax, 6 FT with Times Microwave components, LF solder and ships same-day. The LMR-600 coax of this N cable uses the PE (F) dielectric with a VoP of 87%, resulting in very low insertion loss compared to solid dielectrics. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com N to TNC cable assembly has a female to male gender configuration with flexible LMR-600 series coax and operates to 5.8 GHz. The double shield of this N cable is layered by tinned copper braid over aluminum tape providing shielding effectiveness greater than 90dB. L-com's RF cable assembly with N bulkhead interface enables system designers to have external connections on their product enclosures or to be used for other rack mount and panel mount applications. \*LMR<sup>TM</sup> is a trademark of Times Microwave Systems.

Custom versions of this N female to N male cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LCCA30333-FT6 L-com Low Loss N Female Bulkhead to TNC Male Cable Assembly using LMR-600 Coax, 6 FT with Times Microwave Components, LF Solder data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.



Low Loss N Female Bulkhead to TNC Male Cable Assembly using LMR-600 Coax, 6 FT with Times Microwave Components , LF Solder



# LCCA30333-FT6

## **Electrical Specifications**

| Description               | Minimum | Typical      | Maximum | Units                 |
|---------------------------|---------|--------------|---------|-----------------------|
| Frequency Range           | DC      |              | 5.8     | GHz                   |
| Velocity of Propagation   |         | 87           |         | %                     |
| RF Shielding              | 90      |              |         | dB                    |
| Group Delay               |         | 1.17 [3.84]  |         | ns/ft [ns/m]          |
| Capacitance               |         | 23.4 [76.77] |         | pF/ft [pF/m]          |
| Inductance                |         | 0.058 [0.19] |         | uH/ft [uH/m]          |
| DC Resistance Inner Condu | uctor   | 0.53 [1.74]  |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Cond  | uctor   | 1.2 [3.94]   |         | Ohms/1000ft [Ohms/Km] |
| Jacket Spark              |         |              | 8,000   | Vrms                  |

## **Specifications by Frequency**

| Description           | F1   | F2  | F3   | F4   | F5   | Units |  |
|-----------------------|------|-----|------|------|------|-------|--|
| Frequency             | 0.25 | 0.5 | 1    | 2.5  | 5.8  | GHz   |  |
| Insertion Loss (Typ.) | 0.27 | 0.3 | 0.35 | 0.46 | 0.63 | dB    |  |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

## **Mechanical Specifications**

| <b>Cable Assembly</b> |
|-----------------------|
| Length                |
| Diameter              |

### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 72 in [182.88 cm] 0.87 in [22.1 mm]

LMR-600 50 Ohms Solid Copper Clad Aluminum PE (F) 2 Aluminum Tape Tinned Copper Braid



Low Loss N Female Bulkhead to TNC Male Cable Assembly using LMR-600 Coax, 6 FT with Times Microwave Components , LF Solder

# LCCA30333-FT6



Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength PE, Black 0.59 in [14.99 mm]

1.5 in [38.1 mm] 6 in [152.4 mm] 2.75 lbs-ft [3.73 N-m] 60 lbs/in [1.07 Kg/mm] 350 lbs [158.76 Kg]

## Connectors

| Description                       | Connector 1            | Connector 2            |
|-----------------------------------|------------------------|------------------------|
| Туре                              | N Female Bulkhead      | TNC Male               |
| Impedance                         | 50 Ohms                | 50 Ohms                |
| Mating Cycles                     |                        | 500                    |
| Contact Material and Plating      | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Dielectric Type                   | Teflon                 | PTFE                   |
| Body Material and Plating         | Brass, Silver          | Brass, Tri-Metal       |
| Coupling Nut Material and Plating |                        | Brass, Tri-Metal       |

### **Environmental Specifications**

**Temperature** Operating Range Storage Range

-40 to +85 deg C -70 to +85 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

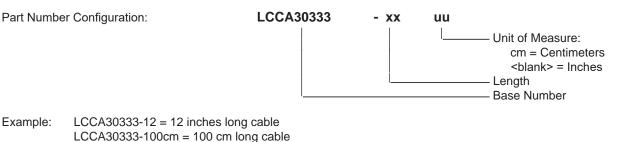


Low Loss N Female Bulkhead to TNC Male Cable Assembly using LMR-600 Coax, 6 FT with Times Microwave Components , LF Solder

# LCCA30333-FT6

## How to Order

Example:

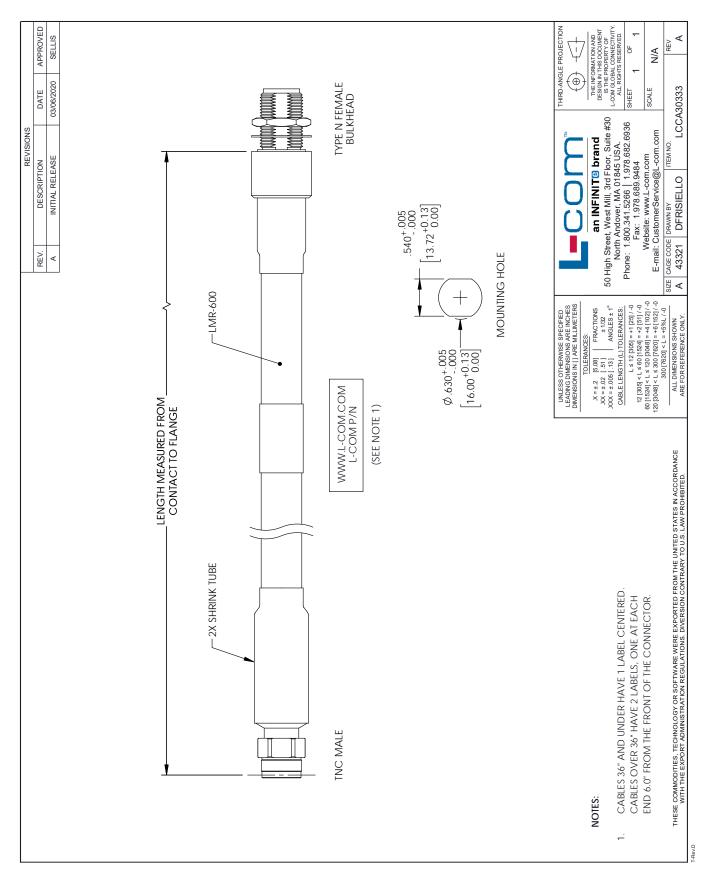


Low Loss N Female Bulkhead to TNC Male Cable Assembly using LMR-600 Coax, 6 FT with Times Microwave Components , LF Solder from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.ontained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

Low Loss N Female Bulkhead to TNC Male Cable Assembly using LMR-600 Coax, 6 FT with Times Microwave Components , LF Solder

# L-com CAD Drawing



LCCA30333-FT6 REV 1.0 | © 2019 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.

USA & Canada (800) 341-5266 | International (978) 682-6936 | I-com.com